Three decades of Explosive High Energy Transients

Chryssa Kouveliotou
NASA's Marshall Space Flight Center (MSFC)

Gamma-Ray Bursts are the most brilliant explosions in space. The first GRB was discovered on 1967, just 40 years ago. It took several years and multiple generations of space and ground instruments to unravel some of the mysteries of this phenomenon. However, many questions remain open today. I will discuss the history, evolution and current status of the GRB field and its contributions in our understanding of the transient high energy sky. Finally, I will describe how GRBs can be utilized in future missions as tools, to probe the cosmic chemical evolution of the Universe and the star formation rates.

George Washington University
January 17, 2013